The Ins and Outs of Utility Billing

City of Brunswick, Maryland

Water Sources

Potomac River

- Currently serves entire City, but typically serves the eastern portion of the City (roughly from City Hall going east) and all of Brunswick Crossing
- Goes through a rigorous treatment process including pumping from intake along C&O Canal, mixing, coagulation, settling, filtration, chlorination, storage
- Water is ready for usage approximately 3 hours from collection at Potomac River
- Ready to serve rate: \$0.01 per 1 gallon
- Much more expensive to treat than spring or well water comparison with other municipalities is difficult unless they are processing river water

Water Sources

Yourtee Springs

- Currently off-line, but typically serves the western portion of the City (roughly to City Hall), Knoxville, and southern Washington County
- Up until May 2018, treatment was less-invasive, only needing chlorination, making water available almost immediately
- Ready to serve rate: \$0.03 per 100 gallons
- MDE has given the City 18 months (December 2019) to install filtration system and storage at Yourtee Springs - City has chosen to keep Yourtee offline until necessary improvements are made since excess rains kept turbidity and testing levels out of compliance - BOIL WATER ADVISORIES
- Cost estimates to install necessary improvements are over \$500,000

Potomac River vs. Yourtee Springs

- Ready to serve rates:
 - ► Potomac River = \$0.01 per 1 gallon
 - ➤ Yourtee Springs = \$0.03 per 100 gallons



Who is Responsible for What?

- Water Department treats and prepares potable water for consumption
- Waste Water Department treats and prepares sewage for disposal (sludge) and release into Potomac River
- Public Works responsible for maintenance of the water & sewer systems, and meter reading
- ► City Hall responsible for utility bill creation and customer service

Water Quality & Regulations

- The City adheres to all guidelines and standards set forth by **EPA** (Environmental Protection Agency) & **MDE** (Maryland Department of the Environment)
- Routine treatment & testing of water and waste water is conducted by qualified, licensed staff members & outside labs
- Test results are submitted to MDE according to their standards
- If water quality does not meet minimum standards, residents are notified immediately by an advisory
- Annual Water Quality Drinking Reports available on website

General Maintenance

Hydrant Flushing:

- Conducted at least three times per year to rid water lines of sediment & debris
- Localized problem areas are flushed weekly
- Flushing is localized to specific streets within designated areas, however, because water lines are all connected, homes surrounding the flushing areas may notice discolored water, sediment, and low pressure while flushing is occurring
- Most of the time, flushing is conducted in the morning hours

General Maintenance

Discolored Water - some discoloration is normal with aging infrastructure universal problem experienced with many municipalities. If the problem persists, contact City Hall to report

Water Main Breaks

- City investigates all calls about potential water main breaks immediately
- Main service lines are repaired as soon as possible when a break is identified
- Main breaks are located before residential service lines, therefore this excess water does not flow through private meters and isn't reflected in any utility bill
- Should residents be requested to run-off excess water because of a major main break, Utility Billing staff is notified and adjusts that usage off of a bill before it is ever mailed to the customer

How are Utility Rates Established?

- Rates are reviewed with the budget process beginning late winter each year
- Advertised, public meetings are held several Finance & Utility Committee
 Meetings, two Mayor & Council Public Hearings from March June
- Budget documents are presented on the City's website prior to approval
- ALL ARE WELCOME AND ENCOURAGED TO ATTEND many years there is NO public comment
- Rates are approved by the Mayor & Council by Resolution

How are Utility Rates Established?

- City budgets are divided into General Fund (police, public works, finance admin, planning & zoning, etc.) and Enterprise Fund (water & sewer ONLY)
- ► Funds need to balance, therefore rates are established based on costs of water & sewer operations ONLY including chemicals, manpower, electricity of plants and pump stations, testing, equipment, and general maintenance of water & sewer lines
- Major replacement projects are pre-planned and funded through the CIP (Capital Improvement Plan)
- Usage tiers are designed to promote responsible water usage fees increase with higher usage ENCOURAGES CONSERVATION

In Town Rate	
Minimum Base up to 4,000 Gals	\$53.00
Tier 1 - 4,001 - 10,000 Gals	\$7.33
Tier 2 - 10,001 - 22,000 Gals	\$11.50
Tier 3 - Over 22,001 Gals	\$13.00
Out of Town Rate	
Minimum Base up to 4,000 Gals	\$76.00
Tier 1 - 4,001 - 10,000 Gals	\$8.25
Tier 2 - 10,001 - 22,000 Gals	\$12.26
Tier 3 - Over 22,001 Gals	\$13.96
Sewer Usage	
Minimum Base up to 4,000 Gals	\$52.00
Tier 1 - 4,001 - 10,000 Gals	\$7.50
Tier 2 - 10,001 - 22,000 Gals	\$15.00
Tier 3 - Over 22,001 Gals	\$17.00

Tiers = Excess of every 1,000 gallons

Full rate sheet available at www.BrunswickMD.gov

Meter Reading

- Brunswick is divided into 12 routes, which are all read every three months
- Most meters are read remotely with a computerized handheld unit, some meters still need to be read manually
- Once readings are captured, the information is downloaded daily into the utility billing software at City Hall
- If a meter is broken, and a reading cannot be obtained, an average for the last four quarters of that resident's usage is used to calculate a bill

Utility Bill Creation

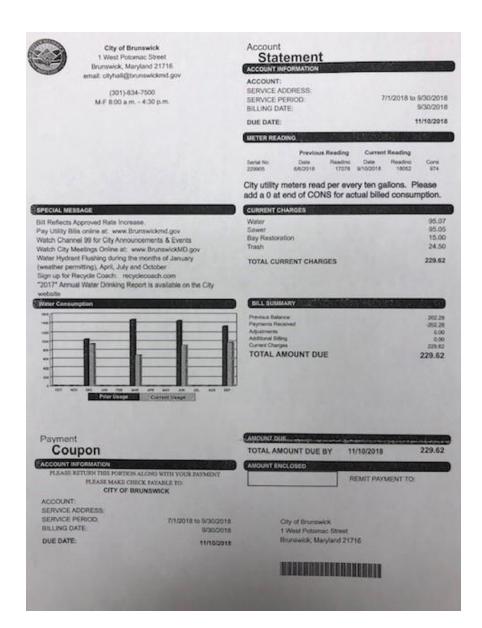
- When all readings are captured, the utility billing software generates a bill for each property based off of usage and the current water & sewer rates
- Bills always reflect usage one quarter behind
 - ▶ **January bill** = usage from October, November, December
 - ► April bill = usage from January, February, March
 - July bill = usage from April, May, June
 - October bill = usage from July, August, September (this is the cycle that rate increases are always reflected on the bills)

Utility Bill Creation

- Utility Billing Specialist analyzes the bills at least four times before they are mailed out
 - High usage reports are re-read and checked for accuracy, so that notes can be made on customer accounts
 - Leak indicator reports are analyzed, and many times, customers are contacted at that time to let them know of a potential leak in their line
 - Bills are generated, stuffed, and posted at City Hall, and delivered to the Brunswick Post Office for delivery
 - ▶ Bills are mailed to tenants and property owners, as the owner is ultimately responsible for all bills at the property utility bills do not follow tenants, but remain with the property

Utility Bill Creation

- ▶ Bills are due 30 days from the invoice date
- ► After 30 days, 2nd notices are mailed and due in 10 days
- Termination notices are posted on the property doors with at least 48-hour final notice
- Once the final termination list has been established, a \$75 delinquent account fee is added to each outstanding account - once this fee is added, customers must pay the full amount due to have their water service reestablished
- Public Works employees complete the final service terminations after the final notice deadline has come and gone
- ► This process is established by the Mayor & Council Staff carries it out on their behalf Staff does not have the authority to deviate from this process



How to Read a Bill

- Special Message Section
- Consumption Graph that compares one year's worth of data
- Previous quarter reading date& consumption
- Current quarter reading date
 & consumption
- Charges include water, sewer, trash, and Bay Restoration (pass-through fee to the State of MD collected by the City)

How Much Water Should I Be Using?

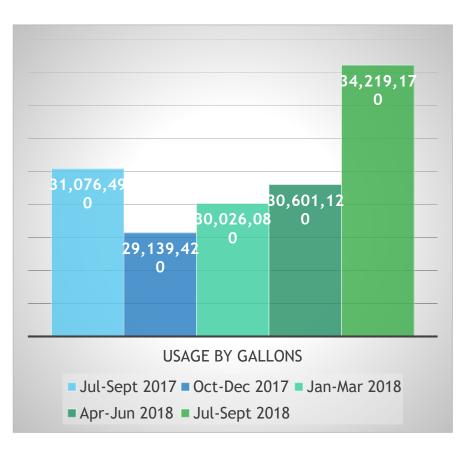
- Average water usage per person:
 - >5,000 gallons/quarter
 - ▶55 gallons/day

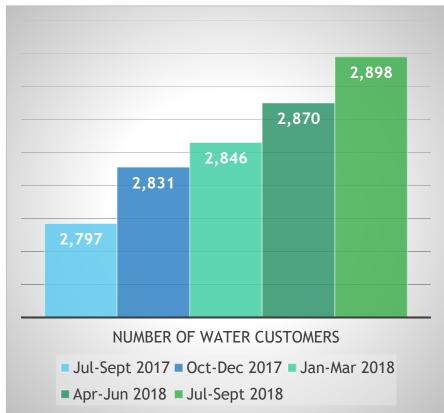


How Much Water Should I Be Using?

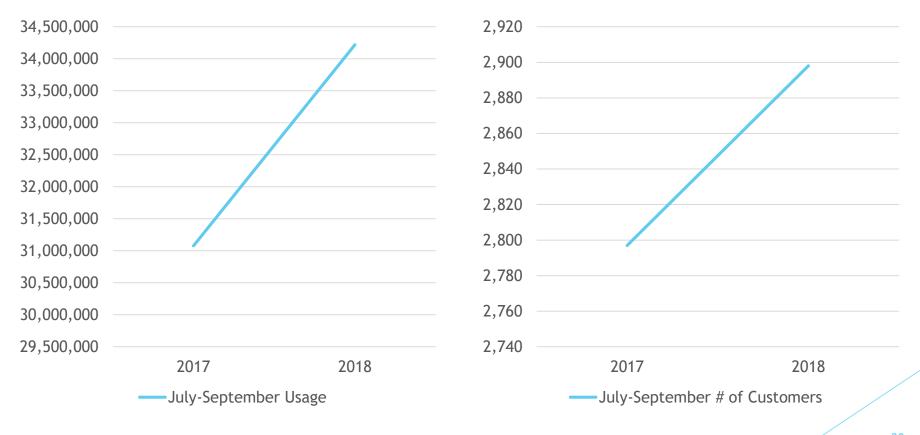
- Usage varies greatly by many factors including:
 - # of members of household
 - Inside activities laundry, dishes, showers
 - Outside activities washing cars, watering gardens & lawns, filling pools
 - ► Lawn watering ¼ acre lot watering to a 1" depth = 6,789 gallons or
 - Running a sprinkler for 1 hour uses 1,020 gallons of water x 3 times per week = 12,240 gallons per month
 - Conservation efforts including low-flow fixtures & appliances, rain barrels, etc.

City-Wide System Usage





City-Wide System Usage



Questioning A Bill

- All questions should be directed to City Hall several staff members are available to assist with bill questions and research, and have access to any notes made on your account during the meter reading cycle
- If staff thinks a re-read of your bill is warranted based on the evidence provided, they will request one and customers will be contacted upon conclusion of re-read
- Staff adheres to all policies/practices set by the Mayor & Council we cannot adjust bills upon request, and will not seek an adjustment from management unless the request falls within the established policy for bill adjustments

Bill Adjustments

- Utility Bill Adjustment Guidance Policy was approved by the Mayor & Council on January 13, 2015
- It states that property owners are responsible for all maintenance and usage in their own service lines
- If water flowed through the property meter, the customer is responsible for that cost
- If an UNDERGROUND leak is found to be located after the water flowed through the meter (only when the meter is located in a crock near the property boundary), and the customer can provide proof of repair, the sewer portion of that leak can be adjusted off of the bill, since that water never entered the sewer system

Payment Plans

- Available to all residents (tenants must have owner approval) can begin a new payment plan once every two years
- ▶ 50% of bill balance must be paid up front remaining 50% can be split into a maximum of six monthly installments
- All other bills must be paid on time, and payment plan must be kept current, or service can be terminated with 48 hour notice
- Several agencies are available to assist customers with their bill if necessary contact City Hall for a list of agencies

Water Leaks

- Leaks are more common than you think
 - ▶ Interior- toilets, faucets, shower heads, ice makers, appliances you cannot always hear or see leaks
 - ▶ Toilet leaks waste approx. 25 times more water than a shower leak and 4 times more than a faucet leak
 - ▶ Typically a faulty flapper or flush valve (floater) in the toilet water tank
 - ▶ A running toilet can waste 1 gallon of water in 30 seconds
 - ▶ Moderately leaking toilets account for approx. 6,000 gallons of water per month
 - **Exterior** outside spigots or hoses
 - ► These types of leaks are the responsibility of the resident and adjustments will **not** be made to utility bills

Common Issues

- Something left running outside hoses or spigots, interior faucets even a fixture that was left running only partially can account for increased usage
- This type of usage is the responsibility of the resident and adjustments will not be made to utility bills
- Common in multi-unit buildings like apartments owners cannot monitor tenant usage in every unit unless they are metered independently of each other

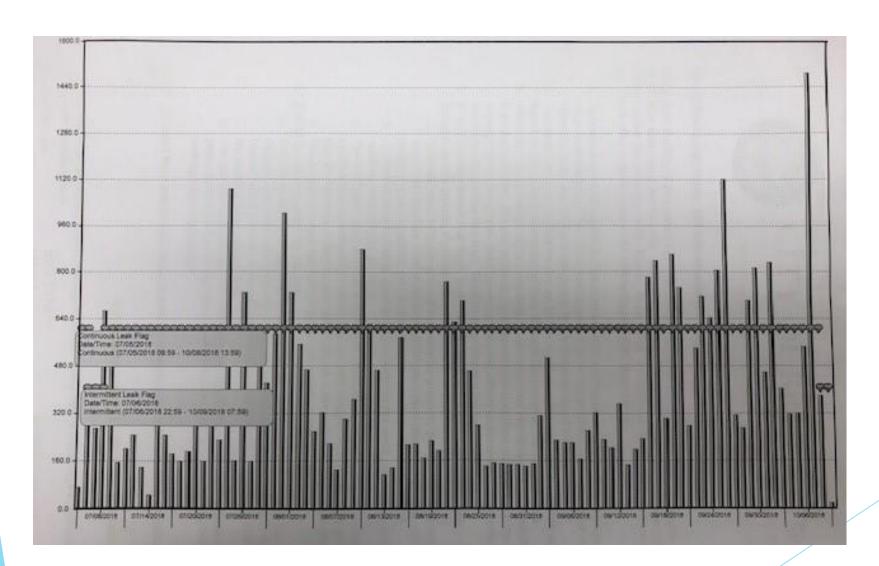
Data-Log Meters

- Most newer meters are "data-logable" staff can re-read the meter and print out daily usage for the last 90 days
- Older meters are not "data-logable" we're working steadily to replace all meters
- Data-logs will show leak indicators and patterns
 - ► A spike in usage that decreases on its own indicates something was left running
 - ▶ A spike in usage that does not decrease, or a steady increase, indicates a leak

Data-Log meters

- Data-logs can identify intermittent leaks and continuous leaks
- Intermittent Leaks water used during at least 50 of the 96 intervals during the previous 24-hour period
 - Could include indoor & outdoor faucet leaks, toilet valve not sealing, washer or dishwasher leak, etc.
- Continuous Leaks water used during all 96 15-minute intervals during the previous 24-hour period
 - Could include all above & running toilets, hot water heater leaks, filling swimming pool, etc.

Data Log - Continuous Leak



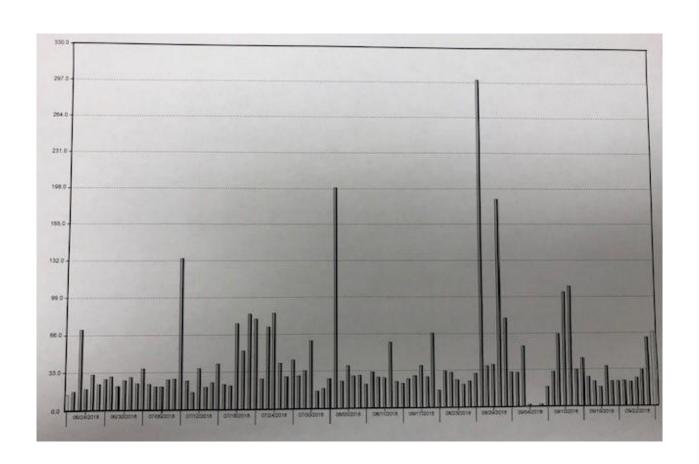
Data Log - Continuous Leak

11/07/2018			City of Brunswi	ck		
		MIU ID: 1832320384	Data Logging Repor	t Daily		
		mio ID. 1032329384	Meter Combination: WATER, 5/8"	1" T-10, GALLONS		
			Interval Date Range: 07/06/2018 - 10	/10/2018		
	Interval	Interval	Interval			
	Read Date	Reading	Consumption	Intermittent Leak	Continuous Leak	
	07/06/2018	277232 3	151.8			
	07/07/2018	277558.2	330.1		S	
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	07/12/2018	279186.3	252.1		Z	
	07/13/2018	279450.8	265.0		Ø	
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	07/23/2018	283128.9	439.7		2	The state of the s
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	08/06/2018	289548.9	521.8		20	
-	08/07/2018	290007.7	4553			
	08/08/2018	290596.1	586.4		3	
	08/09/2018	291187.3	5883	18	[2]	
	08/10/2018	291742.4	554.3		23	
	08/11/2018	292277.4	537.4			
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Data Log - Intermittent Leak

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	07/23/2018	10748.6	1527.9		Name of Colors and Colors
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	07/27/2018	13822.2	43		
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	05/02/2018	24468.0	1376.9		
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	08/18/2018	35192.8	167.0		
	08/19/2018	36017.2	824.4		
	08/20/2018	37239.6	12223		
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	08/28/2018	40748.4	438.2		
	08/29/2018	41185.2 41839.5	655.2		

Data Log - No Leak - Normal Usage



Leak Testing

- The City cannot test private plumbing for leaks.
- Dye-testing tablets are available free of charge at City Hall for testing toilets for leaks. Common food coloring can also be used.
 - Put a few drops in the back of the toilet tank, if the color shows up in the toilet bowl, a leak exists
- Underground leaks are hard to predict, but can present as soggy ground or standing water in your yard.
- It is always recommended to contact a licensed plumber when questioning whether or not a leak is present.

Utility Meters

- Residential meters tend to under-read as they age this is in favor of the resident
- AWWA (American Water Works Association) recommends replacement of meters after 20 years
- Staff is working on Phase III of meter replacements eventually all meters will be the newer models with data-log capability
- If a meter is replaced, residents will be notified in writing and may expect to see an increase in their quarterly bill because actual usage is being captured more accurately
- ▶ Only commercial meters (2" & above) need to follow a re-calibration schedule

Sub-Metering

- Available for residential water meters as of Spring of 2018.
- Must be purchased from the City to ensure they are compliant with our current meter technology.
- Must be installed by a licensed plumber and inspected by the City prior to usage.
- Contact the City for more information.

Questions???

- Contact City Hall
 - Phone 301-834-7500
 - ► Email <u>CityHall@BrunswickMD.gov</u>
 - Website www.BrunswickMD.gov
 - ▶ In person Monday-Friday, 8am-4:30pm



WE ARE HAPPY TO HELP YOU WITH ANY OF YOUR QUESTIONS!!!